



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

December 14, 2009

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Allen Wood
American Electric Power
1 Riverside Plaza,
Columbus, Ohio 43215-2373

Dear Mr. Wood,

On September 8-9, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the John Amos facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain "wet" handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the units at the John Amos facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report .

The final report for the John Amos facility is enclosed. This report includes a specific rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the John Amos facility. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management units and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please explain why. Please provide a response to this request by January 15, 2010. Please send your response to:

Mr. Stephen Hoffman
US Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

If you are using overnight or hand delivery mail, please use the following address:

Mr. Stephen Hoffman
US Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-237
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov

This request has been approved by the Office of Management and Budget under EPA ICR Number 2350.01.

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as “confidential” you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued ongoing efforts to ensure protection of human health and the environment.

Sincerely,
/Matt Hale/, Director
Office of Resource Conservation and Recovery

Enclosures

1.2 Bottom Ash RECOMMENDATIONS

1.2.1 Recommendations Regarding the Structural Stability

Planned dam modification should assure structural stability, but if the existing conditions remain for several years, we recommend a structural stability analysis for various embankments in the Bottom Ash Pond Complex.

1.2.2 Recommendations Regarding the Hydrologic/Hydraulic Safety

None appear warranted at this time.

1.2.3 Recommendations Regarding the Supporting Technical Documentation

None appear warranted at this time.

1.2.4 Recommendations Regarding the Description of the Management Unit(s)

None appear warranted at this time

1.2.5 Recommendations Regarding the Field Observations

None appear warranted at this time.

1.2.6 Recommendations Regarding the Maintenance and Methods of Operation

The maintenance and operation of the dam seem to be adequate. However, the following recommendations may help maintain safe and trouble-free operation:

- ☐ Upon approval of the proposed upgrades to the Bottom Ash Pond complex, proceed with due speed to implement the improvements.
- ☐ The observed crack in the concrete spillway discharge channel and the vegetation in the joints should be sealed and repaired as needed, especially if the spillway is not removed with the proposed modifications to the complex;
- ☐ Before constructing the proposed modifications, the reservoir's major trees and sources of floating debris should be cut and removed to reduce the chance of blockage of the new pipe spillways;
- ☐ The observed small "vole" tunnels should be filled and the voles controlled as needed to prevent damages to the vegetation cover;
- ☐ Verify successful completion of the removal of fill from the emergency spillway at the crest of the dam;
- ☐ Monitor slopes showing erosion and backfill erosion gullies;
- ☐ Mowing should be performed at least annually for proper monitoring of slopes (some tall brush was observed at several locations in Pond 1B and some minor brush observed along the slopes of the Treatment and the Sedimentation ponds);
- ☐ Perform a hydrologic and hydraulic analysis to ensure suitability of the existing drainage shaft 1A (in Pond 1B) to handle design storm;
- ☐ Install support to the wooden stairs down to drainage shaft 1A (in Pond 1B).

1.2.7 Recommendations Regarding the Surveillance and Monitoring Program

Continue current program

1.2.8 Recommendations Regarding Continued Safe and Reliable Operation

None appear warranted at this time.

1.2 Fly Ash RECOMMENDATIONS

1.2.1 Recommendations Regarding the Structural Stability

None appear warranted at this time.

1.2.2 Recommendations Regarding the Hydrologic/Hydraulic Safety

None appear warranted at this time. However it is recommended that a new analysis be provided with updated survey information, since the last dam break analysis was performed over 15 years ago. The John Amos Monitoring and Emergency Action Plan dated January 24, 2008 (see Appendix A-Doc 02) presents a comprehensive assessment of critical infrastructures downstream of the dam. According to Appendix D of this document, a number of residences and businesses have also been identified to be within the flood inundation area. However, the inundation area is apparently based on the original dam break analysis. Several changes in the assumption and methodology compared to the original analysis would be required to assure the new dam break analysis would be consistent with current engineering practice. These changes are listed in Section 6.1.4 of this report.

1.2.3 Recommendations Regarding the Supporting Technical Documentation

No recommendations appear warranted at this time.

1.2.4 Recommendations Regarding the Description of the Management Unit(s)

No Recommendations appear warranted at this time.

1.2.5 Recommendations Regarding the Field Observations

No recommendations appear warranted at this time.

1.2.6 Recommendations Regarding the Maintenance and Methods of Operation

The maintenance and operation of the dam seem to be adequate. However, the following recommendations may help maintain safe and trouble-free operation:

- The WV – Dam Safety report (see Appendix A- Doc 09) indicated that AEP engineers inspected the tunnel and pipe in October 2008. The AEP inspection report concluded the tunnel and pipe were in good condition. The AEP report included a recommendation that the spillway tunnel be re-lined or abandoned. The WV-Dam Safety report indicated that the tunnel will be abandoned and fully grouted as part of the planned dam expansion project;
- Repair access stairs and walkways to monitoring points if the dam is not expanded;
- Evaluate the cause of movement restrictions of floating docks around the decant riser and repair wooden walkway to overflow structure;
- Evaluate valve condition at the overflow structure to assure it is operational in case flow out of the pond needs to be stopped;
- Monitor, address or otherwise repair minor erosion areas and erosion gullies, wet areas and isolated seepage spots.

1.2.7 Recommendations Regarding the Surveillance and Monitoring Program

Continue monitoring existing groundwater, seepage locations and survey monuments.

1.2.8 Recommendations Regarding Continued Safe and Reliable Operation

No recommendations pertaining to the continued safe and reliable operation of the management unit appear warranted at this time.